

In the Figures:

Please enter the two sheets of substitute figures which are found in the appendix of this document.

Conclusion

No new matter has been added by amendments made to the specification, claims, or drawings. All changes are made to correct errors in the original specification or added to provide clarity to the specification and figures. If the Examiner has questions regarding the case, the Examiner is invited to contact the Applicants' undersigned representative at the number given below.

Respectfully submitted,

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By: 

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Version with markings to show changes made

In the Specification:

FIG. 2A shows general implementation of present interconnect scheme, whereupon various endpoints $[2(1-N)]$ 2(1), 2(2), ... , 2(N) are flexibly switched and/or routed through hardware block 10. Preferable, at least one improved endpoint is provided with serial to parallel converter circuit[s] 6 or parallel to serial converter circuit 7, which each convert a multi-bitwidth (e.g., 32-bits) signal for sending to or receiving from one or more 1-bit wide signals generated by or transmitted by multiplexers in block 10.

In the Claims:

1 1. (Twice amended) An electronic switching apparatus for flexibly
2 interconnecting a plurality of signal endpoints, the apparatus comprising:
3 a first circuit for receiving at least one input signal from at least one
4 input endpoint, the first circuit having at least one pair of barrel shift registers
5 coupled to at least one of the at least one input endpoint for receiving the at
6 least one input signal, shifting and rotating the at least one input signal, and
7 transmitting at least one output signal; and
8 a second circuit coupled to outputs from the first circuit for sending at
9 least one received signal to at least one output endpoint.

1 7. (Twice amended) A method for electronic signal coupling, the method
2 comprising the steps of:
3 receiving a first set of digital signals, the received first set of digital
4 signals being provided to [a plurality of] at least one pair of barrel shift
5 registers;
6 shifting and rotating the first set of digital signals; and
7 transmitting a second set of digital signals, the transmitted second set of
8 digital signals being provided from a plurality of multiplexers, the plurality of
9 multiplexers being selectably coupled to the barrel shift registers such that at
10 least one signal selected in the first set of digital signals is selectably coupled
11 for transmission in the second set of digital signals.

1 14. (Once amended) A system for electronic signal coupling comprising:
2 means for receiving a first set of digital signals, the received first set of
3 digital signals being provided to [a plurality of] at least one pair of barrel shift
4 registers;
5 means for shifting and rotating the first set of digital signals; and
6 means for transmitting a second set of digital signals, the transmitted
7 second set of digital signals being provided from a plurality of multiplexers, the
8 plurality of multiplexers being selectably coupled to the barrel shift registers
9 such that at least one signal selected in the first set of digital signals is
10 selectably coupled for transmission in the second set of digital signals.